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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,017	02/04/2004	Roger Keith Stager	ALA-PT013	1122

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PHILADELPHIA, PA 19103

EXAMINER

LE, DIEU MINH T

ART UNIT	PAPER NUMBER
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2114

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/772,017

Applicant(s)

STAGER ET AL.

Examiner

Dieu-Minh Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner. *Draftman (see pto 948)*
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/14/06 & 01/04/07.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the amendment filed 10/16/2006 and the interview on 12/08/06, 12/21/06 and 01/05/2006 in application 10/772,017.
2. Claims 1-22 are again presented for examination.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-22 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Zalewski et al. (U.S. 7,032,126 hereafter referred to as Zalewski_126) in view of Zalewski et al. (U.S. Publication No. 2005/0010529 hereafter referred to as Zalewski_529).

This rejection is being applied for the same reasons set forth in the previous Office Action mailed 07/13/2006. As per claims 1-22 see the previous office action for the detailed teaching of Zalewski as well as the reasons and motivation for combined.

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Applicant asserts that Zalweski_126 and Zalweski_529 failed to teach or suggest the following:

- a. selecting a location on which the snapshot is to be loaded;
- b. creating a point in time (PIT) map for the selected snapshot;
- c. loading the selected snapshot at the selected location.

Examiner respectfully transverses Applicant's argument as follows:

- a. First, Examiner would like to bring Applicant attention to Zalweski_126's method and apparatus for creating a dynamic storage for data recovery and continuous data protection [abstract, fig.1-3, col. 1, lines 40-50; col. 2, lines 20-27]. Zalweski_126 clearly demonstrated the failover operations, snapshot, and a point-in-time (APIT/PIT) capability used to support failover, data recovery/protection process including identifying data (i.e., previous state data), preventing data loss, etc... in a plurality of data storage volumes [fig. 1-3,

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col. 4, lines 30-50]. In addition, Zalweski_529 explicitly illustrated the failover operations, snapshot, and a point-in-time (APIT/PIT) used to support failover, data recovery/protection process including data mirroring and policy in a plurality of data storage volumes including primary and secondary set of data [abstract, fig. 1-4, par. 0005, 0011, 0017-0019]. It is clear that both Zalweski_126 and Zalweski_529 do teach applicant's invention.

Second, it is not true that both Zalweski_126 and Zalweski_529 failed to teach "the selecting a location on which the snapshot is to be loaded". Zalweski_126 clearly demonstrated the location selection function via failover operations, snapshot, and a point-in-time (APIT/PIT) capability used to support failover, data recovery/protection process including identifying data, preventing data loss, etc... in a plurality of data storage volumes [fig. 1-3, col. 5, lines 34-56]. Zalweski_126 further illustrated the this limitation via its user selected protection policy via data mapping, reading, writing, mirroring, etc... (i.e., data structures) including data policy in supporting data detection, correction, and protection process [col. 3, lines 55 through col. 4, lines 50]. Furthermore, Zalweski_529 explicitly illustrated the failover

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operations, snapshot, and a point-in-time (APIT/PIT) used to support failover, data recovery/protection process including data mirroring and policy in a plurality of data storage volumes including primary and secondary set of data [abstract, fig. 1-4, par. 0005, 0011,0017-0019]. Therefore, it is obvious to an ordinary skill in the art that the combination of the Zalweski_126 and Zalweski_529's inventions do clearly teach applicant's limitation.

b. First, it is not true that both Zalweski_126 and Zalweski_529 failed to teach "creating a point in time (PIT) map for the selected snapshot". This is because Zalweski_126 further illustrated the capability of data mapping, reading, writing, mirroring, etc... (i.e., data structures) including data policy in supporting data detection, correction, and protection process [col. 3, lines 55 through col. 4, lines 50].

Furthermore, Zalweski_529 explicitly illustrated the failover operations, snapshot, and a point-in-time (APIT/PIT) used to support failover, data recovery/protection process including data mirroring and policy in a plurality of data storage volumes including primary and secondary set of data [abstract, fig. 1-4, par. 0005, 0011,0017-0019]. By performing data protection continuously process, data can be mapped at any point in time

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for the selected snapshot in supporting the continuously data protection within data storage system.

Second, Zalweski_126 applied the failover operations, snapshot, and a point-in-time (APIT/PIT) capability to perform failover, data recovery/protection process including identifying data (i.e., previous state data), preventing data loss, etc... in a plurality of data storage volumes [fig. 1-3, col. 4, lines 30-50]. By utilizing the snapshot technology therein, data can be mapped at any point in time in order to perform data/error detection, protection, and correction process [col. 4, lines 20-50].

c. First, it is not true that both Zalweski_126 and Zalweski_529 failed to teach "loading the selected snapshot at the selected location". Zalweski_126 clearly demonstrated the loading the selected snapshot at the selected location [fig.1-3, col. 2, lines 28-39; col. 4, lines 30-50; col. 5, lines 11-28; col. 6, lines 13-25] via failover operations, snapshot, and a point-in-time (APIT/PIT) capability used to support failover, data recovery/protection process including identifying data, preventing data loss, etc... in a plurality of data storage volumes [fig. 1-3, col. 4, lines 30-50]. Furthermore,

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Zalweski_529 explicitly illustrated the failover operations, snapshot, and a point-in-time (APIT/PIT) used to support failover, data recovery/protection process including data mirroring and policy in a plurality of data storage volumes including primary and secondary set of data [abstract, fig. 1-4, par. 0005, 0011, 0017-0019]. By performing data protection continuously process, data can be loading the selected snapshot at the selected location in supporting the continuously data protection within data storage system.

Second, as indicate in previous office action that the combination of Zalweski_126's failover operations, snapshot, and a point-in-time (APIT/PIT) used to support failover, data recovery/protection process including identifying data (i.e., previous state data), preventing data loss, etc... in a plurality of data storage volumes and Zalweski_529's applying the failover operations, snapshot, and a point-in-time (APIT/PIT) **used to support failover, data recovery/protection process including data mirroring and policy in a plurality of data storage volumes** including primary and secondary set of data do teach applicant's invention. By utilizing this approach, the multi-data storage volumes data system including backup capability (i.e., OS failover) can enhance its operation performance, more

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specifically to ensuring the error detected, corrected, and replaced (i.e., backup) in proper and efficient manner.

Applicant's arguments filed 10/16/2006 have been fully considered but they are not persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644.

The Tech Center 2100 phone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DIEU-MINH THAI LE
PRIMARY EXAMINER
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DML

01/07/06